



Solar Buyer's Guide

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3 Main Solar Components

Inverter



The Inverter- the heart of your solar system, it converts the DC current produced by the panels into usable 240V AC electricity. We are only comfortable recommending a premium inverter, as it is the hardest working component. Our premium range of inverters also have better Wi-Fi monitoring capabilities. All our inverters come with a 10 year warranty as standard, but have the option to have that extended. Our inverters are completely future proof for home automation, batteries and EV charging.

Panels



The panels- we mainly supply monocrystalline (mono) panels. Mono panels are slightly more efficient, and therefore are considered an important part of our standard and premium ranges. These are highly recommended for installs right across the country. We can offer standard mono perc, half cut mono and shingle mono options. They all have their unique advantages – ask us to find out more.



Racking and Mounting

We supply and install Grace Solar and Clenergy Solar options. These are available in standard silver and all black options.



VARIABLES IN QUOTING A SYSTEM

The reasons why your system price may differ from your neighbours...

- **Your electricity usage and expectations from a system-** the size, monitoring options and price range of the products you want/need
- **Roof Type-** different racking is needed for tin, tile, clip-lock etc.
- **Roof Size and Aspect-** North? East? West? What will fit and where can affect inverter choice
- **Single or Three Phase Supply-** different supplies need different inverters
- **Meter box-** if your meter box is not up to the network regulators' standard for connection (this can be quite expensive, but necessary)
- **The current STC Rebate price-** we use this rebate to help discount the price of your system. This rebate is determined by system size, installation date and location
- **Location-** we employ our own electricians and have to pay them for the travel, this is included in your quote

CHOOSING THE RIGHT SYSTEM FOR YOUR NEEDS

There are many variables to consider when deciding what system to buy, here's a brief breakdown and guide to work with.

System Size

These days a standard, single phase residential install includes a 5 kW inverter with around 6.6 kW of panels. This puts a great dent in the average families' electricity bill, with a typical reduction after installation of around \$400 per quarter.

As a rule of thumb, 1 kW per \$100 on your bill will see the best results, however, this does not take into account your circumstances, how and when you use electricity, your roof space, or what your plans are for the future (kids, pool, air conditioning, retirement, etc.).



System Placement

This all comes down to your roof – the type, the shape, the size and any shading that may be up there. We analyse this data and find the best possible use of your roof space. All mapping is signed off by a CEC Accredited Solar Designer prior to installation.

THE RANGES OF SYSTEM QUALITY

Essentially all solar systems do the same thing- they convert UV rays into electricity. Most have comparable standard warranties. What matters the most, is whether the company will still be around to honour those warranties.

You can break the entire industry down into FOUR levels of quality:

- **JUNK** – The kinds of systems you see being advertised online as Tier One, premium gear, by a company that hasn't been around too long, and will likely not be around too much longer – does the name Eurosolar ring a bell? They usually use tactics like charity donations and celebrity appearances in their advertising to give their customers a false sense of security in their brand.
- **ENTRY LEVEL/BILL BUSTER** – These systems usually include Chinese brands of both panel and inverter, due to ongoing issues, we no longer offer Chinese inverters. Usually carrying a 10-15 year product warranty on the panels, this represents the more affordable end of the price spectrum.
Panels: JA, Seraphim, Longi, Trina, Jinko, Phono
Inverters: Sungrow and Goodwe
- **Premium System** – the kind of systems usually offered by more reputable electrical companies; they are well known brands with 15-25 year product warranties on the panels
Panels: Hyundai, REC, Q-Cells
Inverter: SMA, Fronius
- **Ultra Premium:** These system components are usually European made, and the brands are well established names in the solar industry. The panels usually have a 20-30 year warranty.
Panels: SolarWatt, Sunpower, Tindo, LG
Inverters: SMA, Fronuis, Enphase

If you are comparing quotes, please ask your rep to line them up appropriately against others quotes so that you're comparing like for like.

PAPERWORK AND FEES

EE office staff handle all network paperwork and rebate paperwork on your behalf

Applications

- **Network connection-** (aka CX) approval from your network provider to install your system.
- **Electrical Works Request-** (aka EWR) request for your meter to be changed, this is sent to your network provider who forwards it to your electricity retailer. In NSW it is the home owner's responsibility to arrange meter exchange with their electricity retailer.
- **STC Subsidy-** Often called the rebate, this subsidy is used to discount the price of your system, we will need you to sign off on the app

Fees

- A good company, who have completed a site inspection of your property, will not charge variations for additional work on the day of installation. Looks out for clauses in contracts such as "is your home system ready?" as these can lead to costly variations charged on the day
- **BUYERS BEWARE – SOME RETAILERS WILL CHARGE A METER SWAP FEE.** This is the only "hidden fee" associated with an installation, or at least the only one with EE. This is determined by your electricity retailer, please contact them for more details
- **Cleaning your system-** we offer system service and cleaning from \$249 for all clients who buy their system from us. We recommend this is done every 2 years, but is only mandatory once every 5 years to ensure your 10-year workmanship warranty remains valid



SOLAR MYTHS

Let's get these straight

One of the biggest arguments we come up against quite often when discussing the benefits of investing in solar, is that the reduction in feed in tariffs from the \$0.50 mark makes it a waste of money.

What most people don't realise is the lucky few who are still on those feed in tariffs generally paid a LOT more for their system, which are usually quite small (a 6 kW system on the \$0.50 tariff would have cost close to \$20 000)

On a 6.5 kW system, the average minimum projected saving is approximately \$300 per quarter, and an approximate maximum around \$600. Of course this all depends on your electricity usage habits, and the feed in tariff offered by your electricity retailer. In QLD, Energy Australia is currently offering \$0.18 feed in tariff for single phase systems, and Energy Australia is offering \$0.12 for three-phase systems over 8 kW.

Electricity is something we use every day of our lives, it's not a bill that will ever stop- however, by investing in solar, by installing your own roof top power plant, you can reduce the future impact on your bank account from rising electricity costs.

The next biggest myth would be that the STC Subsidy (used by most installers to discount the price of a system) is going to disappear or reduce rapidly if you don't sign up here and now.... The truth is it can fluctuate from week to week, but only drops majorly (approximately 7%) once a year, on January 1st, hence the lead up to Christmas is a very busy time for anyone in the solar business, with everyone trying to get in before the drop.

QUICK REFERENCE SOLAR TERMS

STC Subsidy AKA Rebate – the government funded subsidy to make solar more affordable for Australian home owners

Feed In Tariff – The price per kilowatt hour (kWh) that your electricity retailer pays

Tier One - Generally speaking Tier 1 solar panel manufacturers are defined as those that: Have been producing solar panels for 5 years or more; Are either publicly listed on a stock exchange or have a strong and stable balance sheet; Have fully automated production and a high degree of vertical integration

Monocrystalline Panels – the solar cell is cut from one large silicon crystal – more efficient

Polycrystalline Panels – made by pouring the silicone into square moulds – Less efficient

